Amendments to the Claims:

The following listing of claims will replace all prior versions, and listings, of claims in the application:

- 1. (Original) A ferroelectric thin film formed of crystals in which directions of polarization axes are inconsistent with an applied electric field direction in a crystal system.
- 2. (Original) A ferroelectric thin film formed of crystals in which directions of 180° domains are inconsistent with an applied electric field direction in a crystal system.
- 3. (Original) A ferroelectric thin film formed of crystals in which directions of 90° domains are inconsistent with a direction perpendicular to an applied electric field direction in a crystal system.
- 4. (Previously Amended) The ferroelectric thin film as defined in claim 1, wherein the 180° domains are arranged at a constant angle to the applied electric field direction.
- 5. (Currently Amended) The ferroelectric thin film as defined in claim 1, wherein the 90° domains are arranged at a constant angle to the applied electric field direction.
- 6. (Previously Amended) The ferroelectric thin film as defined in claim 1, wherein the 180° domains reversely rotate in a predetermined electric field with respect to the applied electric field direction and a ferroelectric thin film plane.

- 7. (Previously Amended) The ferroelectric thin film as defined in claim 1, wherein the 90° domains reversely rotate in a predetermined electric field with respect to the applied electric field direction and a ferroelectric thin film plane.
- 8. (Previously Amended) The ferroelectric thin film as defined in claim 1, wherein polarization is arranged at a constant angle to the applied electric field direction have the same polarization in the same applied electric field.
- 9. (Previously Amended) The ferroelectric thin film as defined in claim 1, formed of a polycrystal highly oriented in the applied electric field direction in a ferroelectric thin film plane.
- 10. (Previously Amended) The ferroelectric thin film as defined in claim 1, wherein a polarization axis distribution exhibits no anisotropy with respect to the applied electric field direction in a ferroelectric thin film plane.
- 11. (Previously Amended) The ferroelectric thin film as defined in claim 1, using: a tetragonal Pb(Zr,Ti)O₃ ferroelectric which is (111)-oriented along the applied electric field direction with respect to a ferroelectric thin film plane.
- 12. (Previously Amended) The ferroelectric thin film as defined in claim 1, using: a rhombohedral Pb(Zr,Ti)O₃ ferroelectric which is (001)-oriented along the applied electric field direction with respect to a ferroelectric thin film plane.

- 13. (Previously Amended) The ferroelectric thin film as defined in claim 1, using: a bismuth-layer-structured ferroelectric which is (111) or (110)-oriented along the applied electric field direction with respect to a ferroelectric thin film plane.
- 14. (Previously Amended) The ferroelectric thin film as defined in claim 1, using: an SrBi₂Ta₂O₉ ferroelectric which is (115), (111), or (110)-oriented along the applied electric field direction with respect to a ferroelectric thin film plane.
- 15. (Previously Amended) The ferroelectric thin film as defined in claim 1, using: a $Bi_4T_3O_{12}$ ferroelectric which is (117), (111), (107), or (317)-oriented along the applied electric field direction with respect to a ferroelectric thin film plane.
- 16. (Original) The ferroelectric thin film as defined in claim 11, using a (111)-oriented platinum group metal electrode with a full width half maximum of 2° or less.
- 17. (Original) The ferroelectric thin film as defined in claim 12, using a (001)-oriented platinum group metal electrode with a full width half maximum of 2° or less.
- 18. (Original) The ferroelectric thin film as defined in claim 13, using a (111)-oriented platinum group metal electrode with a full width half maximum of 2° or less.
- 19. (Original) The ferroelectric thin film as defined in claim 14, using a (111)-oriented platinum group metal electrode with a full width half maximum of 2° or less.

- 20. (Original) The ferroelectric thin film as defined in claim 15, using a (111)-oriented platinum group metal electrode with a full width half maximum of 2° or less.
- 21. (Original) The ferroelectric thin film as defined in claim 13, using a (110)-oriented platinum group metal electrode with a full width half maximum of 2° or less.
- 22. (Original) The ferroelectric thin film as defined in claim 14, using a (110)-oriented platinum group metal electrode with a full width half maximum of 2° or less.
- 23. (Original) The ferroelectric thin film as defined in claim 15, using a (110)-oriented platinum group metal electrode with a full width half maximum of 2° or less.
- 24. (Previously Amended) The ferroelectric thin film as defined in claim 16, using an alloy electrode of lead and platinum group metal.
- 25. (Previously Amended) The ferroelectric thin film as defined in claim 1, formed by using a mixed solution of a sol-gel solution and an metal organic decomposition solution.
- 26. (Previously Amended) The ferroelectric thin film as defined in claim 1, comprising silicon, or silicon and germanium in elements of ferroelectric.
- 27. (Previously Amended) A method of manufacturing the ferroelectric thin film as defined in claim 1, comprising:

performing crystallization by rapid heating in an oxidizing gas atmosphere at a pressure less than 10 atmospheres.

- 28. (Previously Amended) A ferroelectric memory device using the ferroelectric thin film as defined in claim 1.
- 29. (Previously Amended) A ferroelectric piezoelectric device using the ferroelectric thin film as defined in claim 1.